

APPLEBY -- Application No. 09/051,070

if the input is not determined to be an allowable response to a most recent one of the messages, determining whether the input is an allowable response to another stored message represented by stored message data.

29. (New) An interactive dialogue apparatus for dialogue with a user, the apparatus comprising:

an output device for outputting messages to the user;

an input device for receiving input from the user;

a processor for processing said input;

an output message buffer for storing a plurality of messages output to the user;

and

a transaction store for storing a type of allowable response for each of the messages output to the user;

wherein the processor determines whether the input is an allowable response to a most recent one of the messages output to the user, and if not, determining whether the input is an allowable response to a previous one of the messages output to the user.--

REMARKS

Reconsideration and allowance of this application in view of the foregoing amendments and the following remarks are respectfully requested. Currently, claims 1-16 and 20-29 are pending in this application.

Rejections Under 35 U.S.C. §102:

Claims 17-19 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Berger et al (U.S. '981, hereinafter "Berger") or under 35 U.S.C. §102(e) as allegedly being anticipated by Morin et al (U.S. '841, hereinafter "Morin"). Claims 17-19 have been canceled without prejudice or disclaimer. The above rejections are therefore moot.

Claims 1-16 and 20-23 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Morin. Applicant respectfully traverses this rejection.

For a reference to anticipate a claim, each element must be found, either expressly or under principles of inherency, in the reference.

Applicant respectfully submits that Morin fails to disclose each element of the claimed invention. In particular, Morin fails to disclose or even suggest storing data representative of messages output by an output device, determining whether an input is an allowable response to a most recent one of the messages and if not, determining whether the input is an allowable response to a preceding message.

The above feature recited in independent claim 1 is supported by, for example, page 15, lines 5-11, page 17, lines 26-29 and page 19, lines 3-7 of the specification. Through the above feature, the present invention is able to store not only the most recent question asked but also at least one previous question. The present invention thus has the capability of interpreting a user's input as containing information relevant to the previous question if it is determined that the user's input is not relevant to the

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most recent question. Morin fails to disclose or suggest this feature or any of the above advantages derived therefrom.

With respect to now independent claim 2, Applicant submits that Morin fails to disclose “wherein said rule store contains first rules comprising criteria specifying correct relationships between words of said lexical store, and, associated with said first rules, one or more second rules each corresponding to one of said first rules but with one relationship criterion relaxed....”

While Morin may disclose a plurality of rules for natural languages, and the relationships of these rules, Morin fails to disclose a second set of rules which has relationships criteria relaxed with respect to the first set of rules. That is, the fact that Morin discloses more than one set of rules for different languages does not mean that Morin discloses a second set of rules with one relationship criteria relaxed. Column 17, lines 22-55 and 60-65 cited in the Office Action fail to disclose this feature. This cited passage of column 17 discusses the construction of constraint trees for the actual meaning (i.e., dependent on the question that is being asked rather than on the linguistic level) but in no way discloses second rules “with one relationship criteria relaxed.” Through the use of such second rules, the apparatus of claim 2 is capable of recognizing languages that are not quite correct and at the same time identifying the nature of the error which is present. If the Examiner maintains the above rejection of claim 2, Applicant respectfully requests that the next Office Action specifically discuss how Morin discloses second rules having a “relaxed criteria.”

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Accordingly, Applicant respectfully submits that claims 1-16 and 20-23 are not anticipated by Morin and respectfully requests that the rejection of these claims under 35 U.S.C. §102(e) be withdrawn.

New Claims:

New claims 24-29 have been added to provide additional protection for the invention. Claims 24-27 require determining whether is an allowable response to a most recent one of the messages, and if not, determining whether the input is in allowable response to another one of the messages. Similar comments apply to claims 28 and 29. Accordingly, Applicant respectfully submits that new claims 24-29 are allowable.

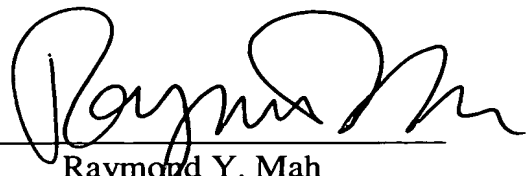
Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

1. (Twice Amended) Training apparatus for training a user to engage in transactions with another person whom the apparatus is arranged to simulate, the apparatus comprising:

an output device for outputting of messages to a user;

an input for receiving input [dialogue] from [a] the user;

a lexical store containing data relating to individual words of said input [dialogue];

a rule store containing rules specifying grammatically allowable relationships between words of said input [dialogue];

a transaction store containing data relating to allowable transactions between said user and said person, said data defining, for said output messages, types of allowable inputs from said user;

an output message buffer for storing data representative of the most recent message output by the output device and at least a preceding one of said messages output from the output device;

a processor having at least read access to the lexical store[,], and the rule store [and the transaction store], said processor being arranged to process the input [dialogue] by comparing the input [dialogue] with the words contained in said lexical store[,], and with the relationships specified by the rules contained in said rule store, [and with the data specified in the transaction store,] in order to recognize the occurrence in the input [dialogue] of words contained in said lexical store[,], and in the

relationships specified by the rules contained in said rule store, [in accordance with the data specified in the transaction store,] and, in dependence upon said recognition, to generate output [dialogue] indicating when correct input [dialogue] has been recognized; and wherein said processor is further responsive to the data contained in the message buffer and the transaction store to:

(a) determine whether said input is an allowable response to a most recent one of the output messages represented by data stored in the output message buffer;
and

(b) if said input is not determined to be an allowable response to a most recent one of the messages, determine whether said input is an allowable response to preceding output message representing data stored in the output message buffer;

an output device for making the output [dialogue] available to the user so that said user can be trained to engage in transactions with another person.

2. (Twice Amended) Training apparatus for training a user to engage in transactions with another person whom the apparatus is arranged to simulate, the apparatus comprising:

an input for receiving input dialogue from a user;

a lexical store containing data relating to individual words of said input dialogue;

a rule store containing rules specifying grammatically allowable relationships between words of said input dialogue;

a transaction store containing data relating to allowable transactions between said user and said person;

a processor having at least read access to the lexical store, the rule store and the transaction store, said processor being arranged to process the input dialogue by comparing the input dialogue with the words contained in said lexical store, with the relationships specified by the rules contained in said rule store, and with the data specified in the transaction store, in order to recognize the occurrence in the input dialogue of words contained in said lexical store, in the relationships specified by the rules contained in said rule store, in accordance with the data specified in the transaction store, and, in dependence upon said recognition, to generate output dialogue indicating when correct input dialogue has been recognized; and

an output device for making the output dialogue available to the user so that said user can be trained to engage in transactions with another person;

[Apparatus according to claim 1, in which] wherein said rule store contains first rules comprising criteria specifying correct relationships between words of said lexical store, and, associated with said first rules, one or more second rules each corresponding to one of said first rules but with one relationship criterion relaxed, said processor processing said input dialogue using both said first rules and second rules.

4. (Thrice Amended) Apparatus according to claim 1, in which the processor is arranged to [generated] generate output [dialogue] responsive to input [dialogue], and to detect recognized errors in said input [dialogue], and, on detection

thereof, to indicate said recognized errors separately of said responsive output [dialogue].

6. (Twice Amended) Apparatus according to claim 1 which is arranged to provide language training, in which said rules, said words, and said output [dialogue] are in a training target language, and further arranged to generate user guidance [dialogue] in a source language for said user and different to said target language.

7. (Amended) Apparatus according to claim 6 in which the user guidance [dialogue] comprises guidance as to the meaning of the output [dialogue].

8. (Twice Amended) Apparatus according to claim 6 in which the user guidance [dialogue] comprises an explanation of any detected errors in the input [dialogue].

9. (Twice Amended) Apparatus according to claim 6 in which the user guidance [dialogue] indicates suitable further input [dialogue] which could be provided.

10. (Twice Amended) Apparatus according to claim 1 in which said input [dialogue] and/or said output [dialogue] comprise text.

11. (Thrice Amended) Apparatus according to claim 1, in which said input [dialogue] comprises speech, and further comprising a speech recognizer arranged to recognize the words of said speech.

12. (Twice Amended) Apparatus according to claim 1 in which said output [dialogue] comprises speech, said apparatus further comprising a speech synthesizer.

13. (Twice Amended) Apparatus according to claim 1, further comprising a user interface arranged to accept said input [dialogue] and make available said output [dialogue] to the user.

14. (Amended) Apparatus according to claim 13, in which said user interface comprises a display and in which said output [dialogue] is displayed on said display.

15. (Twice Amended) Apparatus according to claim 6, in which said user interface comprises a display to display said output [dialogue] and user guidance [text] is normally not displayed on said display, and further comprising an input device via which a user may selectively cause the display of said user guidance [text] on said display.